

METHOD AND SYSTEM FOR FAILURE ACCOMMODATION
OF GAS GENERATOR FUEL METERING SYSTEM

ABSTRACT OF THE DISCLOSURE

An apparatus for providing a backup fuel metering system for the
5 gas generator section (24) of a gas turbine engine (10) is disclosed that
includes a gas generator (24) and an augmentor (40). The apparatus
includes a gas generator fuel metering system (52) providing fuel to the
gas generator nozzles (32) and an augmentor fuel metering system (54)
providing fuel to an augmentor (40). The augmentor fuel system (54)
10 includes a diverter valve (88) which selectably directs fuel to the
augmentor (40) during augmentation operation or to the gas generator
nozzles (32) during a gas generator metering system failure or critical
engine operation. The system allows the gas generator nozzles (32) to be
supplied with fuel flow from the gas generator metering system (52), the
15 augmentor metering (54) system or both. When the gas generator
nozzles (32) are being supplied with flow from both metering systems the
system is capable of improved fault accommodation.